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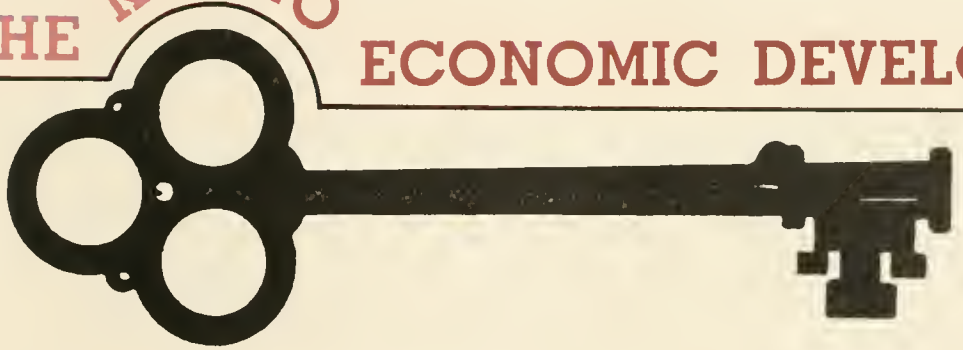

MONTANA'S ECONOMY . . .

MONTANA'S WORKFORCE . . .

TOOLS FOR ECONOMIC DEVELOPMENT . . .

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INTRODUCTION

Our State and Nation are experiencing major changes, shifting demographics, rapidity of technological change, and globalization of economic competition. Montana can no longer rely on economic development strategies of the past. We can no longer insulate or isolate ourselves from a changing world. We must remain competitive. To insure this effort we must invest in human resources -- our major economic development tool.

Employers want employees who have leadership skills; reasoning and problem solving skills; reading, writing, math, and science skills; an understanding of economic concepts; positive work habits and attitudes; interpersonal skills; communication skills; ability to follow directions; specific vocational technical skills; and the ability to assume responsibility. Vocational technical education and skill development programs prepare individuals with these competencies. These programs prepare employees consistent with the following labor force predictions by the Bureau of Labor Statistics:

- 83 percent of the available jobs by the year 2000 will <u>not</u> require a 4 year college education.
- 18 of the 20 fastest growing occupations <u>will</u> require vocational technical education.
- Vocational technical education will prepare students for 26 of the 37 occupations which the Bureau of Labor Statistics predict will account for the largest number of new jobs by 1995.

In 1988, Montana was ranked by a major study as having the best educated workforce in the nation. These ratings are impressive, but we must not become complacent. As we approach the 21st Century, vocational educators, job trainers, and other service delivery system operators must work cooperatively with employers in order to achieve excellence in the workplace.

Members of the Steering Committee sincerely appreciate the cooperation and assistance received from vocational educators, program operators, and from employers in conducting this project.

PROJECT OVERVIEW

The Montana Council on Vocational Education initiated this project, A Quality Workforce - The Key to Economic Development," in partnership with other agencies, schools, institutions, and associations. The primary goals of this effort are to:

- foster a closer working relationship between vocational technical education, job training programs, and other service delivery systems;
- identify the training needs and partnerships which exist between the service delivery systems and private sector;
- identify areas where vocational technical education, job training, and other service delivery systems can enhance and more effectively contribute to Montana's economic development.

A Steering Committee was organized to plan and carry out the following project objectives:

1. Develop a handbook which addresses Montana's economy, workforce, and delivery systems and their role and contribution to Montana's economic development.

    a. The Department of Commerce developed a succinct overview of the status of Montana's economy, economic conditions, goals, short and long range plans, and strategies for strengthening Montana's economy.

    b. The Research and Analysis Bureau of the Montana Department of Labor and Industry developed a succinct overview of the status of Montana's workforce, demographics, labor supply and demand (particularly in those fields relating to this project), and identified skills and training employees will need.

    c. The various delivery systems developed role, scope, and mission statements, and provided other pertinent information relative to persons served and training areas provided.

2. Conduct a survey to obtain employers' perceptions of the following: the skills desired in their employees; the essential factors for a favorable climate for economic development; the present and future role of vocational technical education, job training, apprenticeship, adult education, and human resource programs in economic development; and the changes or improvements which could be made to make these programs more responsive to economic development.

3. Conduct a survey of secondary and postsecondary vocational technical administrators and instructors, JTPA personnel, program operators, and other delivery system personnel to determine linkages or partnerships which presently exist with business and industry, and to identify how these delivery systems can be better utilized for economic development purposes.

4. Conduct a conference, forum, or symposium involving state agency personnel; vocational educators; economic development specialists; business, labor, and industry personnel; state legislators; and others in an effort to further identify and clarify the role of vocational technical education, job training, and service providers in economic development and to obtain input for strengthening and/or improving these efforts.

5. Report findings and recommendations to appropriate state and local agencies, personnel, and to the Montana Legislature.

SECTION I -- MONTANA'S ECONOMY

A. Overview of Montana's Economy

Geographically, Montana is a diverse state, from the high plains and broad rivers of the east to the mountain ranges and fertile valleys of the west. On the plains, cattle and sheep ranching, wheat and barley production, and other agricultural activities more recently have been augmented as economic mainstays by coal, oil, and gas extraction. In the west, timber harvesting, forest products manufacturing, and hardrock mining traditionally have supported the economy, with tourism growing strongly in later decades.

The 1970's were a time of dramatic growth in Montana. Overall, the state's performance during that decade outdistanced that of the national economy. Employment grew by 32 percent, compared to 25 percent nationally. Income grew by 57 percent (inflation adjusted), but only 44 percent nationally. Growth was strong in high-income, goods-producing industries like energy resource mining (but not metals), construction, and manufacturing, and even stronger in transportation, health services, business and professional services, and public services. Property income (dividends, interest, and rent) increased substantially. Only in agriculture did employment decline, although farm income grew sharply between 1971 and 1973, and between 1977 and 1978 (falling between 1973 and 1977). For the first time since 1910-1920, more people moved into Montana than moved out.

A combination of back-to-back national recessions, a national crisis in agriculture, and slumping world energy prices, however, halted Montana's booming growth as the 1980's began. The 1980's were a period of decline for most of the natural resource industries (with the exception of metal mining in the latter half of the decade, non-fuel mineral mining more generally, and non-resident travel). Uneven growth in Montana characterized the first years of the 1980's. In 1985, the state experienced another recession while the national economy continued to grow slowly.

Real labor income in the non-farm, natural resource industries fell about three percent per year between 1980-1988. Labor income of agricultural producers reached disastrously low levels before improving in more recent years. The state's economy as a whole went flat. Population, a lagging indicator, grew during the early 1980's, peaked at 824,000 in 1985, and declined to 804,000 in 1987. Out migration for that time was estimated at 29,000.

In 1986, Montana's economy began to improve. Agriculture posted the largest income gain in 1986, spurred by good weather and higher federal farm subsidy payments. Private services was the strongest non-farm sector, with gains in business, health, lodging and recreation services. Other gains were seen in metal mining, food processing, and air transportation. Declines were still apparent in wholesale and retail trade, oil and gas extraction, construction, railroad transportation and communications, and durable manufacturing (wood products, primary metals processing, and electrical machinery manufacturing).

Montana's natural resource industries' share of total labor income has declined steadily from about 28 percent in the early 1970's to just over 15 percent in the last half of the 1980's. Much of this decline is attributable to notable declines in labor income in agriculture. Income in agriculture in the last half of the 1980's, however, has improved, while labor income in non-farm natural resource industries has declined. Also, the natural resource industries' share of total basic labor income is declining, falling from an annual average of 69 percent in the first half of the 1970's to 58 percent in the latter half of the 1980's.

While the share of the state's economy directly attributable to natural resource industries has declined during the last two decades, conditions and trends in these industries remain fundamental determinants of local economic conditions around the state as well as the overall performance of the state's economy.

According to the Bureau of Business and Economic Research at the University of Montana, the outlook for the 1990's is for modest growth, if at all, for most of the natural resource industries for the first few years of the decade. Gains should continue in the metal mining industries and industries related to travel and tourism. Losses will likely occur in the lumber/wood products industry, resulting from reduced timber supplies.

The chart below summarizes economic activity in Montana's natural resource industries:

PAST AND PROJECTED TRENDS IN EMPLOYMENT & LABOR INCOME IN MONTANA'S NATURAL RESOURCE INDUSTRIES

		Average Annual Rates of Change				
		----------Historical----------				---Projected*---
Employment:	E	Seventies		Eighties		Nineties
Labor Income:	LI	1970-74	1975-79	1980-84	1985-88	1989-92
Lumber and Wood Products	E	+0.4%	+4.4%	-2.8%	-1.5%	Moderate Decline
	LI	+1.9	+7.4	-3.7	-3.0	
Paper Products	E	+13.9	+2.6	+5.1	-2.0	Generally Stable
	LI	+11.8	+6.3	+6.4	-2.6	
Metal Mining	E	+5.2	-10.3	-7.9	+16.1	Continued Growth
	LI	+7.5	-7.6	-10.4	+19.4	
Nonmetal Mining	E	+4.0	+2.5	+1.9	+2.5	Generally Stable
	LI	+5.5	+1.4	+3.4	+2.2	
Coal Mining	E	+35.4	+22.8	-0.4	-3.3	Generally Stable
	LI	+51.7	+29.0	-0.4	-5.0	
Oil and Gas Exploration & Extract	E	-1.0	+10.7	+8.8	-15.9	Stable to Modest Growth
	LI	+6.3	+10.5	+8.0	-17.2	
Petro Refining	E	+3.0	-2.6	-3.2	-2.9	Generally Stable
	LI	+4.4	+2.7	-1.9	-4.0	
Non-Resident Travel	E	+0.9	+4.6	+3.2	+5.5	Continued Moderate Growth
	LI	+1.4	+4.9	-0.1	+2.9	
Farm and Ranch	E	+0.4	-2.3	-0.5	-1.3	Modest Decline to Modest Growth
All Non-farm Natural Resource Industries	E	+0.8	+2.6	-0.2	+0.1	Modest Decline to Modest Growth
	LI	+3.3	+4.3	-2.7	-3.1	
All Sectors of the Montana's Economy	E	+3.1	+3.1	+0.6	+0.4	Stable to Modest Growth
	LI	+5.1	+2.2	-2.0	-0.2	

Source: University of Montana, Bureau of Business and Economic Research (using data from the U.S. Department of Commerce, Bureau of Economic Analysis). * Estimates or ranges as generally projected by the Bureau of Business and Economic Research (January 1990).

B. The Impact of Global Competition and Technological Revolution on Montana's Recent and Future Economy

During the past quarter century, the global economy has been shaped by two forces that have challenged America's--and Montana's--economic life. New international competition and microelectronic technologies have altered the balance of economic power in the world.

In the 20 years following World War II, Japan and Western Europe rebuilt their economies, and, during the next 10 years, continued to improve their competitive stance by accessing modern education and technology, presenting serious challenges to the status of the U.S. economy. At the same time, once economically immature nations moved from producing low-cost, high-volume standard goods to capital intensive complex goods. Also, many newly industrialized nations have become agriculturally self-sufficient, closing markets for America's agricultural commodity exports.

As late as 1960, one-fifth of all American products competed directly with foreign-made goods. By 1980, three-fourths of American goods faced foreign competition, especially in microelectronic technology. Today, all industries face international economic competition.

Because of the growing economic self-sufficiency of the lesser developed nations, the developed nations have shifted to the customized production of more complex goods and services. Manufacturing and marketing these goods and services requires skilled and flexible work forces, the use of new technologies, and the reorganization of production processes. Today's products are information-intensive, requiring modern workers to be highly skilled and adaptable--workers who can produce innovative, high-quality, specialized goods for market niches worldwide--workers who can produce more using less material.

The evolution of all the world's individual economies spurred the restructuring and downsizing of many large U.S. corporations, and also spurred the growth of innovative small businesses, leading to a new cycle of research, development and productivity.

In the past, Montana, like many western states, has been less affected by the ups and downs of the national economy. While the state experienced recessions paralleling those of the nation, they tended to be milder and shorter. The natural resource base, providing food and raw materials, cushioned the state from severe economic shocks.

The rapidly changing global economy, however, reduced that advantage. Montana's oil, gas, and coal industries immediately felt the impact of decisions made in the Middle East. Canadian timber and Far Eastern grain now compete with Montana products in the world's markets. Clearly, this is a time of economic transition for Montana--to survive and prosper in the context of an integrated and competitive global economy.

Realities of the irreversible shift in the world economy present growing and changing sets of tensions and opportunities. Giant federal deficits have ended any major new federally stimulated growth such as that seen in the Pacific Northwest after the Great Depression. State and local governments increasingly are inheriting responsibility for all aspects of economic development. Finding additional forces for economic vitality is important in preserving corporate profit, and necessary to maintaining and expanding human opportunities and preserving the environment and quality of life.

With the advent of the global economy, the extent to which states are influenced by "external" developments has increased. Government and business must continuously keep apprised of changes in order to identify emerging patterns and how they impact the state economy.

Issues fundamental and central to the success of business and economic development include education, training, capital, infrastructure, amenities, and state and local government fiscal capacity.

Montana's workforce is one of the most valuable development assets in its portfolio, and maintaining that asset is imperative.

C. For The Future

Historically, Montana has used its natural resources--wealth, natural beauty, and well-educated population to build an economy based on agriculture, mining, timber, and tourism. While pursuits in these areas may continue to provide the state's economic base, they cannot continue to drive the economy as in the past.

Montana is faced with many challenges in the global economy-including distance from heavily populated markets, dependence on commodity industries, mechanization and reduction of employment in basic industries such as agriculture and wood products, as well as national and international perceptions of the state's remoteness.

State and local governments and public/private partnerships must increase responsibility for their own economic stability, growth, and well-being--to find or create political and financial resources to undertake a myriad of development projects.

In part, "economic development" is a process of continually analyzing Montana's assets and weaknesses in the light of the constant and rapid changes in the global economy--of identifying emerging patterns, and of identifying and implementing optimal ways of developing resources and diversifying local economies. In partnership with the private sector, Montana's growing networks of state government agencies, transportation hubs, and local development groups support local initiatives and enterprises. While economic development and economic activities are primarily local phenomena, state government, acting as facilitator and broker, must continue to promote the processes of development: to help retain existing businesses; to help diversify local economies by promoting the creation of new businesses; to seek new sources of capital; to promote the development and use of new technologies; to pursue the value-added principle to reduce Montana's dependence on commodity export; to seek new markets--both national and international--for goods and services. In short, to create a balanced "conducive" business climate.

The requirements of a good "business climate" and a high quality of life are (at last) becoming synonymous. The importance of qualitative factors has been recognized by firms and individuals concerned more with the benefits derived from infrastructure and amenities including superior educational systems, affordable housing, state-of-the-art telecommunications systems, adequate transportation, air and water quality, cultural programs, recreational opportunities, health care, and more.

Particularly critical to Montana's economic development and economic health is the continued need to invest in human resources through education at all levels, and to develop programs for life-long learning. Improving the level of skills of the workforce is probably the most important factor in increasing productivity. Education with "internationalism" in mind is a must for Montanans to interact in an integrated global economy.

Recognizing and acting on a holistic approach regarding economic policies, Montanans can develop and pursue flexible, long-term economic strategies to adapt to the dynamics of new global realities.

SECTION II -- MONTANA'S WORKFORCE

As Montana's economy continues to evolve, and just as agriculture replaced mining and open range grazing, so too has employment in services or retail sales outstripped agriculture. Montana's economy continues to become more diverse and varied, and these changes reflect a broader, more substantial economy as we move into the Information or Services Age of the 80's and 90's.

A. Demographics

By looking closely at how our population will change over time, both nationally and in Montana, we can begin to understand just what changes we can expect in work and workers into the future. A portion of our total population makes up what is called our national labor force -- those working or seeking work -- and changes in the general population directly affect our labor force. In a real sense our national population represents a reservoir of workers for our national labor force, and changes in population directly affect available workers.

Nationally, population increased 11.4% during the 70's and 9.9% during the 80's. The 90's are expected to slow to a 7.1% increase. In Montana, population increased a rapid 13.3% during the 70's, but fell to a low 3.0% increase from 1980 to 1990. The 90's will show only a slight improvement, with an increase of 5.5% in population expected.

B. Characteristics

Now that we have a better sense of the probable numerical changes in Montana's population over the next decade, we need to look more closely at the specific characteristics of our future workforce. What will the age structure of Montana's population be, and how will the age structure affect the participation rates of Montana's workforce? And what about female migration into the workforce, and the role of minorities in Montana's workforce?

Since 1980, Montana's youngest age groups, those less than five years old and those 5-17 years of age, decreased 5% by 1990 and are expected to decrease another 10% by the year 2000. Nationally, the same pattern of decrease is expected. These groups are the least involved in the Montana workforce, although high school students working part-time will continue to be involved in service jobs such as those found in fast food restaurants. Already, those in the 65

years-and-older grouping are beginning to be hired for many part-time positions that until recently were filled by high school students.

Montana's main youthful workers are 18-24 years of age. This grouping is expected to decrease almost 28% between 1980 and 2000. Nationally, this group is expected to decrease 17%. Once again, this decrease in the younger end of our population will cause greater participation from older workers.

The large number of children born after World War II until about 1961, who are often referred to as the "baby boom" generation, have shaped American society as they have grown up. The effect of the baby boom generation on Montana can be seen in the age group 22-44 years old. Montana will experience a 19% growth rate between 1980 and 1990, and will then decrease until the 1980 to 2000 change will reflect an overall 3% increase in this age group.

The aging of the "baby boomers" will begin to substantially affect the mature workers from 45-64 years of age. Montana will experience only modest growth in this age group between 1980 and 1990, but will see a 32% increase between 1990 and 2000. Nationally, even higher increases are expected. An aging workforce may have a series of negative impacts on the economy, with older workers being less adaptable to a changing work place and changing work skills unless the importance of lifelong learning is stressed as a way to prevent these kinds of impacts.

The number of senior citizens aged 65 and over is expected to increase 19% in Montana between 1980 and 1990 and only an additional 1% between 1990 and 2000. In the past, this group has been perceived as basically retired from and therefore playing a relatively small part in Montana's workforce. Yet, in one day in the United States, 7 people are added to the ranks of the centenarians. As this age group increases and as improved health care and life style changes continue to improve the physical and mental components of older age, this age group will play an increasingly important role in our workforce, both in Montana and nationally.

The number and percentage of women in the workforce have undergone dramatic change over the past 50 years. There is a history of increasingly larger numbers of women entering the national workforce. Male participation in the national labor force will decline from over 61% in 1972 to almost 53% in the year 2000. While men are projected to still constitute the majority of the national workforce, as women continue to enter the job market this difference in the share of the total workforce will continue to narrow. Montana is expected to follow national trends; however, because of Montana's industrial mix and the fact that Montana has

few occupations and industries that are predominately male oriented, Montana is expected to have higher female participation rates than the nation as a whole.

While nonwhites are expected to constitute 30% of the new additions to the national workforce to the year 2000, this is not the case in Montana. Why? Montana's largest minority group, Native Americans, make up less than 5% of the state's population, while the second largest group, those of Hispanic extraction, make up just over 1% of the population. Also, Montana is not in the "flow" of significant migration among states nationally, and therefore can expect no great infusion of minorities. James E. Kielley of Towers Perrin is warning business executives that developing their companies' "human capital" in the future will become at least as important as developing new technologies. He says in an incredibly short time, the American workforce will be transformed from one that is predominantly white male to one that is the most culturally, ethnically, racially, and sexually diverse in the world.

C. Where Will the Jobs Be?

Several significant factors will influence the growth of new job markets in the future, with the shift to a "service economy" being perhaps the single most important. Basically a service economy is one in which more jobs are to be found in providing services -- as opposed to manufacturing, agriculture, and other goods-producing industries -- than in creating tangible products. Typical service economy jobs are in transportation and retailing, education and health care, finance and real estate, and government and utilities. The goods-producing industries will decrease slightly by 2000 while the service-producing industries will increase.

Nationally, employment will increase considerably in many occupations between 1986 and 2000. The number of technicians and related support workers will grow 38% and public service workers by 31%. In contrast, operators, fabricators and laborers will grow only 3%, while agricultural, forestry and fishing workers will actually decline in number.

Much of what is projected for the U.S. as a whole is also projected for Montana's future. Between 1986 and 2000 some 50,000 jobs are projected for Montana. Montana's service-producing industries will provide more than 92% of these new jobs. This translates into 3,300 of the 3,600 new jobs annually that will be in the service-producing industries.

Montana's greatest job opportunities for the future are located in the business and consumer services area and will increase by 29%. Business and consumer services, when combined with wholesale and retail sales jobs, will account for 75% of the total new jobs in Montana.

In business and consumer services, new jobs will be available in business services, personal services (hairdressers and jobs in amusement/recreation), legal services (lawyers and paralegal personnel), educational services (university faculty, school teachers, librarians, and teachers aides), social services (social workers, teachers, aides, food staff), health services (dentists, physicians/surgeons, pharmacists, therapists, registered and licensed practical nurses), and other business/consumer services (waiters/waitresses, cashiers, bartenders, maids and housekeepers, cooks).

D. What Skills & Training Will Employees Need?

Based on past data the average worker will have six employers in the course of a lifetime. A laid off worker today has a one-in-twenty chance of getting retrained for a new job and an 80% likelihood of either finding no job or one that pays much less than the previous job. Because tomorrow's workers will be looking at work careers with at least six different employers and different jobs, everyone should be particularly conscious about designing maximum flexibility and breadth into their educational careers.

Comparing jobs in 1984 nationally to those in the year 2000, the average number of years of schooling attended to obtain a job will increase by almost another year to thirteen and a half years. The high school diploma that currently is required for 58% of America's jobs will provide an opening to only 49% by the year 2000. Almost a third of the new jobs created will be filled by college graduates.

Education in the classroom does not always directly equate to job skills. Some suggest the ability to transfer skills from one job to another may be one of the most important skills to learn, and the ability to continually adapt individual knowledge and skill is perhaps more important than technical expertise in maintaining employment in the future job market.

Certain kinds of skills will be in greater demand than others, and the general rule of thumb is that more advanced skills will provide much better opportunities for jobs and working career advancement.

Perhaps even more important than the clear trend toward increased skill needs for new jobs is the shift that is developing now in existing jobs and that will continue into the future. This shift is the increasing need for enhanced skills to conduct daily job responsibilities which are more complex than before and will continue to make more demands upon the worker. According to Peter Druker in "The New Realities", our first priority must be a high level of universal literacy, including computer and technical skills as well as reading, writing, and arithmetic.

And from James E. Rosenbaum of Scripps Howard News Service, employers must be willing to use grades in their hiring practices. Statistics point out that grades and test scores, though they have little impact on early employment, are good predictors of productivity and that students with good grades are more productive workers from the outset, and generally receive higher wages after five to 10 years of work. Grades also closely reflect job performance. The job world increasingly requires the reading, writing, and math skills that grades reflect, and these realities will only increase in the future.

According to the study "America in the 21st Century: Human Resource Development," at a minimum, most jobs of the future will require good communications skills, basic competency in math and reading, the ability to give and receive directions and an aptitude for solving problems. And Druker says that schools must also systematically teach how to convert information into usable knowledge; help students develop the desire, capacity, and knowledge to keep on learning throughout life; convey the need for responsibility now that knowledge really is power; and utilize computers, television and video-cassettes to open up learning as the printed book did in the fifteenth century as these tools can enable teachers to help, lead, and encourage, rather than conveying the subject matter itself. But there will always be many people without the education required for knowledge-based work. We need to pay more attention to productivity and worker self-respect in the many non-knowledge jobs that must also be filled.

Learning is no longer confined to a period between childhood and the first job, but extends over a person's entire lifetime. Workers are, of course, still expected to come to their jobs with established job skills. Now and in the future, however, workers are also expected to maintain those skills and add additional ones through evening and other-than-work-time classes. And more companies are establishing their own training programs for their workers, or providing funding for training for workers. Lifelong learning is the new educational reality for those who wish to remain in the job market.

SECTION III -- TOOLS FOR ECONOMIC DEVELOPMENT

Secondary and postsecondary vocational technical education, job training, and other delivery systems play an important role in economic development. The emphasis of these systems is to assist in the continuous improvement of the quality of our workforce through training, retraining, and upgrading of the skills and knowledge of our present and future workforce.

The ability of our nation to shape the course of the 21st Century and compete internationally is largely dependent on the productivity of a quality workforce. The crisis envisioned in the publication, Workforce 2000, has begun to emerge. Increased demand for highly skilled workers, coupled with an aging workforce has created shortages of skilled workers. Further, the "skills gap" is predicted to widen as the skill requirements of new jobs increase faster than the skill levels of the labor force. Technological change is also accelerating. We must not allow the "skills gap" to widen any further. Employers must be able to hire persons with essential skills necessary to compete in the international markets and the workplace.

Montana's vocational technical education, job training, and other delivery systems outlined in this section provide the know-how and solution for preparing an educated, skilled, and competent workforce.

A. Secondary Vocational Education

1. Purpose

To provide vocational and prevocational training to secondary school students enrolled in approved vocational programs in grades 9 through 12. The programs are designed to provide students with the skills necessary for entry level employment or advanced vocational training.

2. Participants

Students enrolled in vocational and prevocational programs at grades 9 through 12.

3. Programs or Course Offerings

Agriculture Education and Forestry, Business and Office Education, Health Occupations, Comprehensive Consumer and Homemaking Education , Wage Earning Home Economics ,

Technology/Industrial Arts Education, Marketing and Distributive Education, and Trade and Industrial Education.

4. Contributions to Montana's Economy

It is providing a trained workforce for the employers of Montana. About 29,000 secondary students are enrolled in these programs each year. About 60 percent of them go directly to work after high school graduation. About 7 percent go directly into the military service. The remainder go on to some form of postsecondary training.

5. Contact for Further Information

For further information contact:

Department of Vocational Education Services
Office of Public Instruction
State Capitol
Helena, MT 59620
(406) 444-3035

6. Exemplary Partnership/Coordination Effort

Cooperative Education

Students who are enrolled in a vocational program receive part of their training through written cooperative agreements signed between the local secondary school district, the students and the employer. The employer agrees to hire the student and train the student in skills related to the student's occupational interest. The school helps supervise the student and work site, and credit toward graduation is granted.

B. Postsecondary Education, Montana University System

1. Purpose

Postsecondary vocational-technical education has been endorsed by the Montana Board of Regents as a vital component of a comprehensive and diverse state system of higher education. Through its five vocational-technical centers, three public community colleges, and Northern Montana College, the Board of Regents provides oversight for educational programs designed to provide citizens with the vocational and technical

competencies they need in order to enter, advance, or change their chosen careers. Students acquire technological competencies through curricula which are validated by appropriate business and industry at regular intervals. Instructional programs and community service are designed to meet present and emerging occupational needs of local communities as well as those of the state, the region, and the nation. These institutions are funded through state appropriations, student tuition and fees, and in the case of the community colleges, local community tax support.

2. Participants

The postsecondary two-year vocational-technical system provides open admission for adult residents of Montana who need to acquire competencies to enter the workforce, upgrade existing skills, or prepare for a career change.

3. Programs or Course Offerings

The postsecondary vocational-technical system of Montana provides educational programs in a broad array of areas, including: agriculture, business, computer and information technology, health, law and protective services, and technical and industrial disciplines. A certificate of completion or the Associate of Applied Science degree is awarded upon successful fulfillment of program requirements.

4. Contributions to Montana's Economy

Education for work is the key mandate of the postsecondary vocational-technical system. Economic renewal is provided to communities which face loss of productivity, unemployment, and decline of business by educational institutions able to respond quickly and creatively to changing needs within these communities. Each year, several hundred individuals successfully complete vocational-technical educational programs and enter the workforce in jobs closely related to their specific programs of study. Many return as part-time students to gain added technological expertise in a rapidly changing work environment.

5. Contact for Further Information

For specific information on educational programs at the various postsecondary institutions, write or call the Admissions Office at:

Billings Vocational-Technical Center
3803 Central Avenue
Billings, MT 59102
(406) 656-4445

Butte Vocational-Technical Center
Basin Creek Road
Butte, MT 59701
(406) 494-2910

Great Falls Vocational-Technical Center
2100 - 16th Avenue South
Great Falls, MT 59405
(406) 771-7140

Helena Vocational-Technical Center
1115 North Roberts Street
Helena, MT 59601
(406) 444-6880

Missoula Vocational-Technical Center
909 South Avenue West
Missoula, MT 59801
(406) 542-6882

Dawson Community College
Glendive, MT 59330
(406) 365-3396

Flathead Valley Community College
Number One, First Street East
Kalispell, MT 59901
(406) 752-5222

Miles Community College
Miles City, MT 59301
(406) 232-3031

Northern Montana College
Havre, MT 59501
(406) 265-3700 or 1-800-662-6132

6. Exemplary Partnership/Coordination Effort

Partnerships and coordination efforts between the postsecondary vocational-technical system and local business enterprise have been established in all communities served by the various educational institutions. Worker training is the central focus of such partnerships. Particular emphasis has been given to development of coordination with business, labor, military, governmental, and human resource agencies. To strengthen the educational process through the creation and maintenance of a seamless connection with occupational performance is a major goal of the vocational-technical education system in Montana.

C. Montana's Seven Tribal Colleges

1. Purpose

Montana's seven tribal colleges have developed over the past 15 years with the intent of answering the unique needs of the Indian people of Montana. Each college has developed a vocational education component to train tribal members for specific job opportunities on the reservation. Each college has the ability to develop additional vocational programs as the need and opportunity presents itself. Flexibility is a cherished quality each college maintains in meeting the needs of its tribal members.

2. Participants

Each Tribal College maintains an open admission policy which does not discriminate on the basis of race, creed, or sex. Vocational education is for all who desire it and can benefit from it.

3. Programs or Course Offerings

a. Blackfeet Community College - Carpentry; Clerk Typist; Early Childhood Education; Electrician; Plumbing

b. Dull Knife Memorial College - Automotive Mechanics; Carpentry; Clerk Typist; Heavy Equipment Operation/Maintenance; Steno-Clerk Typist; Welding

c. Fort Belknap Community College - Automotive Mechanics; Business Bookkeeper; Accountant Technician; Business Office Clerk; Carpentry; Human Services; Science Pre-Nursing

d. Little Big Horn College - Carpentry; Industrial Arts; Secretarial Education; Steno-Clerk Typist

e. Salish-Kootenai College - Carpentry; Custodian Plan Maintenance; Early Childhood Education; Secretarial Science

f. Stone Child College - Carpentry; Secretarial Science

g. Fort Peck Community College - Automotive Mechanics; Business Bookkeeper; Accountant Technician; Business Office Clerk; Carpentry; Human Services; Science Pre-Nursing

4. Contributions to Montana's Economy

Montana's seven tribal colleges have a placement rate for those earning certificates and Associate degrees of 80%. This is on reservations which have unemployment rates of 40% - 80%. Those who are not placed often have transferred to four-year institutions to continue their education in pursuit of a Bachelor's or Master's degree.

5. Contact for Further Information

Blackfeet Community College
P.O. Box 819
Browning, MT 59417
Phone: 406-338-5441

Dull Knife Memorial College
P.O. Box 98
Lame Deer, MT 59043
Phone: 406-477-6215

Ft. Belknap College
P.O. Box 547
Harlem, MT 59526
Phone: 406-353-2205

Ft. Peck Community College
P.O. Box 575
Poplar, MT 59255
Phone: 406-768-5551

Little Big Horn College
P.O. Box 370
Crow Agency, MT 59022
Phone: 406-638-2228

Salish-Kootenai College
P.O. Box 117
Pablo, MT 59855
Phone: 406-675-4800

Stone Child College
Rocky Boy Route
Box Elder, MT 59521
Phone: 406-395-4313

6. Exemplary Partnership/Coordination Effort

Ft. Peck Community College and A & S Industries on the Ft. Peck Sioux and Assiniboine Reservation

Ft. Peck Community College has trained a large number of individuals from the tribes who have gone on to have successful careers at A & S Industries in a wide variety of jobs. A & S Industries is one of the largest employers in Montana and is owned and operated by the Ft. Peck Sioux and Assiniboine tribes. This relationship has endured over the past decade and has improved each year as the Ft. Peck CC gains in expertise and faculty concerned with vocational education, academic education, and student support services!

D. Job Training Partnership Act

1. Purpose

The Job Training Partnership Act (JTPA) was enacted in 1982 to permanently authorize job training and related assistance to economically disadvantaged individuals, dislocated workers, and others who face barriers to employment. Montana receives approximately $11,000,000 annually. The Governor's Job Training Coordinating Council sets performance standards for all programs. Two Private Industry Councils (PICs) are partners with local government to provide policy direction and oversight in Montana's two service delivery areas. The funds and programs are administered by the Montana Department of Labor and Industry, Research, Safety and Training Division, and by Montana Job Training Partnership, Inc.

2. Participants

Title IIA	Economically Disadvantaged adults and youth. Older Workers (55+ years of age)
Title IIB Summer Youth	Economically Disadvantaged Youth (14 - 22 years)
Title III	Dislocated Workers (recently laid off; long term unemployed)
Title IVC	Veterans

3. Programs or Course Offerings

The programs combine education with actual work training situations. Education programs may include adult basic education, GED preparation, or classroom training for specific occupations. Work training situations may include work experience or on-the-job training through contracts or agreements with prospective employers.

4. Contributions to Montana's Economy

From July 1987 through June 1989, 6,927 adults (ages 22+) were enrolled in four different programs: adult economically disadvantaged, older workers (age 55+), dislocated workers (laid off or long term unemployed), and veterans. Of these, 5,169 completed their training, with 76.7% being placed in employment. During the same two years, 6,296 youth (ages 14 - 21) were enrolled in two different programs: economically disadvantaged and/or summer employment/training. Of these, 5,448 completed the training objectives and were encouraged to return to their education. In addition, 1,733 were placed in employment.

5. Contact for Further Information

Montana Department of Labor and Industry
Research, Safety and Training Division
Box 1728
Helena MT 59624
Phone: 406-444-4500

Job Training Partnership, Inc.
101 North Last Chance Gulch
Helena MT 59601
Phone: 406-444-1330

6. Exemplary Partnership/Coordination Effort

Northwest Montana Human Resources Council, Kalispell

Sponsored by Northwest Montana Human Resources JTPA funds and Kalispell School District Carl Perkins funds, participants attend classes in the morning and work at non-profit agencies during the afternoon. The classes offered are: Office Procedures/Computers; Child Development; Culinary Arts; Learning Strategies; Small Engines; and Forestry. The work experience occupations parallel the classes. In addition, bus transportation from rural areas, newsletters, and small group counseling are provided.

E. Adult Basic Education (ABE)

1. Purpose

Federal, state and local funds are used to provide adults with basic educational skills to enable them to benefit from job training and retraining programs and to obtain and retain productive employment so that they might fully enjoy the benefits and responsibilities of citizenship. The education attainment of this program is limited to a high school equivalency such as the GED (General Educational Development).

2. Participants

Individuals 16 years of age or older.

3. Programs or Course Offerings

Instruction is provided in basic academic skills that meet the needs of each adult. The lowest level of instruction helps those that can not speak the English language. The highest level helps those obtain a high school equivalency such as the GED (General Educational Development). In Montana the Adult Basic Education participants generally need the most help with improving their mathematics skills.

4. Contributions to Montana's Economy

The 23 Adult Basic Education centers with up to 16 satellite programs provided educational services to about 5,700 persons per year. For fiscal years 1988 and 1989 a total of 11,371 adults were provided educational services, of which 43 percent were working at a secondary level (grade level 9-12). In

calendar year 1989, 1,417 individuals received a GED (high school equivalency). Statistical information from the ABE centers for fiscal years 1988-1989 reported that 1,639 adults gained and/or had job advancements. A secondary benefit of improving academic skills is that participants achieve greater self-esteem. The center reported that during the past two years 358 individuals were able to leave public assistance.

5. Contact for Further Information

Additional information can be obtained from:

Dr. Bob Ruthemeyer
Adult Education Specialist
Office of Public Instruction
State Capitol
Helena, MT 59620
(406) 444-4443

6. Exemplary Partnership/Coordination Effort

Billings Adult Basic Education Center

The Billings ABE Center in cooperation with the Billings Rescue Mission provide educational services to homeless adults. Of the 74 participants served in 1989, 23 were able to prepare job resumes. Thirteen adults obtained jobs.

F. Apprenticeship and Training

1. Purpose

Apprenticeship is an organized system through which practical skills of a trade are learned. The learning process is supervised by a craftworker who teaches these skills on the job. In addition to on-the-job training, a course of instruction in related and technical subjects is also required. While completing apprenticeships, progressively increasing wages based on skill improvement are paid.

Apprenticeship is an attractive alternative in the world of work because it offers career training to those who either do not choose, or are financially unable, to attend school full-time beyond high school.

Depending on the craft or trade, your training term can last from one to four years.

When an apprenticeship program sponsor certifies that the apprentice has fulfilled all requirements of the training program, a Certificate of Completion is issued by the Montana Apprenticeship and Training Bureau. This validated national credential is proof that the completing apprentice is a fully qualified journeyworker.

2. Participants

Most programs require participants to be at least 18 years old and physically fit for the occupation.

In addition, most apprenticeship sponsors require a high school diploma and some require that you pass an aptitude test.

Apprenticeship openings depend on the availability of job openings. Normally there are more applicants than vacancies and entering into apprenticeships is becoming increasingly competitive.

3. Programs or Course Offerings

Currently in Montana there are 160 apprenticeable occupations recognized by the Apprenticeship and Training Bureau. (The Federal Bureau of Apprenticeship and Training lists 817 apprenticeable occupations any of which might be recognized in Montana if an apprenticeship sponsor wanted to apply for program certification.)

4. Contributions to Montana's Economy

One of the highest marks Montana consistently receives in national business and economic development surveys is for its highly trained and skilled workforce. Apprenticeship programs have made and will continue to make significant contributions to the building of Montana's workforce. This is done through cost-effective, certified individual training conducted under nationally accepted standards.

Industry, too, benefits greatly. Out of apprenticeship programs come all-round craft workers competent in all branches of their trades and able to work without close supervision because their training has enabled them to use imagination, ability, and knowledge in their work. An

adequate supply of skilled workers with these qualities is vital to economic development.

Apprenticeship-trained workers also frequently move up to fill important supervisory roles in industry. Many project managers, superintendents, and craft supervisors began their careers as apprentices.

In Montana, 578 new apprenticeships have been registered during 1988 and 1989. During the same time, 231 Certificates of Completion have been issued to apprentices throughout the state. Currently, there are 250 approved apprenticeship programs in Montana employing 575 registered apprentices.

5. Contact for Further Information

Apprenticeship and Training Bureau
Employment Policy Division
Montana Department of Labor and Industry
P.O. Box 1728
Helena, MT 59624
(406) 444-4500

6. Exemplary Partnership/Coordination Effort

Montana Operating Engineers/Associated General Contractors Joint Apprenticeship Trust

Since the early 1970's, the Montana Operating Engineers and the Associated General Contractors have operated the Joint Apprenticeship Trust to supply trained, qualified workers to work in the construction industry in Montana.

Participants are recruited from across the state as positions become available. During the past year over 200 applicants were interviewed for 15 positions.

The program identifies apprenticeship placement opportunities, provides four weeks of classroom training each year for participants, and monitors participants' progress on the job.

The Joint Trust program currently has 15 registered apprentices. Fifty percent of these are women and thirty percent are minorities. Seventy-five percent of the program participants earn their apprenticeship Certificates of Completion.

The program is supported with a combination of contributions from the participating contractors and JTPA Title II and Title III funds.

G. Montana JOBS Program

1. Purpose

The purpose of the Job Opportunity and Basic Skills Training (JOBS) program is to provide recipients of Aid to Families with Dependent Children (AFDC) the opportunity to obtain the education, training, and employment needed to avoid long term dependency on welfare.

Federal regulations require that the necessary supportive services be provided to participants, including child care.

2. Persons Served

Senate Bill 70 mandates that all non-exempt AFDC recipients participate in JOBS. Exemptions include: a child under 16; incapacitation; advanced age; remoteness; illness of a family member; employment over 30 hours per week; the final month of pregnancy; and age of the youngest child.

3. Programs or Course Offerings

Seventy-five percent of the state's AFDC recipients reside in 10 Montana counties. Complete programs will be implemented on July 1, 1991, in Flathead, Missoula, Gallatin, Lewis and Clark, and Yellowstone Counties. On January 1, 1991, the following 5 counties will begin complete programs: Cascade, Silver Bow, Ravalli, Lincoln, and Lake. Minimal programs will begin July 1, 1991 in an additional 17 counties, where 20% of the AFDC population resides.

A complete JOBS program consists of high school education, basic and remedial education, English proficiency, job skills training, job readiness activities, and two of the four following work activities: group and individual job search; on-the-job training; work supplementation; or community work experience.

A minimal program consists of high school education or equivalency, one of the four work activities, and referral to a non-JOBS employment service.

Postsecondary education may be provided based on an individual's aptitudes and abilities. Each individual's case manager must also utilize the following criteria in determining the appropriateness of the training:

a. training must provide skills for jobs that will lead to self-sufficiency and that are available in the local area; or if the job is available elsewhere in the state, the participant must agree to move upon completion of the training;
b. attendance must be at least 1/2 time, as defined by the institution;
c. participant must be making satisfactory progress, as defined by the institution; and
d. postsecondary education must be consistent with the individual's employment goals.

4. Placement of Graduates or Completers

The ultimate goal of the Montana JOBS program is to place AFDC recipients into employment. These jobs should allow individuals to become self-sufficient or provide upward mobility to ultimately reach this economic goal.

5. Contribution to Montana's Economic Development

Montana's AFDC recipients are a valuable resource. Providing them with the education, training, and work activities necessary to secure work is an investment in Montana's economic future. As these workers enter the labor market, Montana employers can choose from a pool of trained and motivated workers.

The success of the Montana JOBS program depends on a partnership between the business community and employment and training providers. These providers must train individuals to meet the needs of Montana employers.

6. Contact for Further Information

For more information contact:

Sheila Hogan, JOBS Specialist
Department of Social and Rehabilitation Services
Family Assistance Division
P.O. Box 4210
Helena, MT 59604
(406) 444-4545

ROLE OF DELIVERY SYSTEMS FOR MONTANA'S FUTURE

Montana is extremely fortunate in having a highly educated, productive, industrious and adaptable workforce, ranking among the best in the nation. This can be attributed in a large measure to its people, their attitudes, and work ethic; outstanding education, job training, adult basic education, apprenticeship, and human resource development training programs; and the commitment by Montana's businesses to upgrade the skills of their employees. These service delivery systems are the key to a well trained workforce, economic development, and to Montana's future. Human resources are our greatest asset.

The U.S. Department of Labor expects the U.S. economy to generate more than 18 million additional jobs between 1988-2000. Seventy-seven percent of those employed in the year 2000 will require less than a college degree. However, workers having the most education and training are in a better position to obtain jobs that on the average are higher paying.

Estimates indicate that well over 75% of those who will make up the workforce in Montana in the year 2000 are already out of school. In a highly competitive and technologically changing world, the need for upgrading and retraining workers commensurate with employer needs and the workplace will be enormous.

Experts agree that a competitive workforce is essential for successful economic development. Surveys of business leaders reveal that a primary factor in a businesses decision to invest or locate in a particular area is the availability of labor and its quality and costs. Therefore, an educated and trained workforce is a major determinant in how well a state or community can compete for jobs.

The delivery systems and programs outlined in Section III of this handbook are vital in preparing and retraining our workforce. Personnel serving these systems encourage partnerships and linkages with business, labor, and industry in an effort to train employees commensurate with employer needs.